

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph starting at page 2, line 30, with the following replacement paragraph:

One aspect of the present invention provides a method in a channel adapter configured for communications with a server network system. The method includes first storing, in a table configured for storing multiple entries, an entry having a work queue entry field that specifies a transmitted work queue entry. The entry includes at least first and second link fields each configured for referencing another entry in the table. In particular, the first storing step includes storing in the first link field a first entry identifier for either the transmitted work queue entry, or a subsequently transmitted work queue entry relative to the transmitted work queue entry. The first [[link]] entry identifiers in the respective first link fields form a first linked list specifying a transmit sequence of the transmitted work queue entries. The method also includes detecting an acknowledgement for at least a first of the transmitted work queue entries stored in the table, and generating in the table a second linked list. The second linked list specifies an acknowledgement sequence of the transmitted work queue entries. In particular, the second linked list is generated by storing, in the second link field of the entry corresponding to the transmitted work queue entry, a second entry identifier. The second entry identifier is stored based on the detecting step, and specifies either the first transmitted work queue entry or an entry having received a subsequent acknowledgement relative to the detected acknowledgement.

Replace the paragraph starting at page 10, line 6, with the following replacement paragraph:

The retransmission module 76 includes a table 20 and a table manager 22. The table 20 includes entries 24 that identify WQEs having been transmitted according to a service protocol requiring acknowledgment. In particular, each entry 24 includes a WQE field 26, a first link field ("T") 28, and a second link field ("Ack") 30. Referring to Figure 3A, as each packet for a WQE (e.g., WQE5) is transmitted by the HCA 12 in step 100, the table manager 22 adds in step 102 a corresponding table entry 24 (e.g., in location 4). In addition, the table manager 22 inserts a

corresponding link identifier into the first link field 28 that specifies the relative position of the corresponding WQE entry 24 to other transmitted WQEs. In particular, the first link fields [[30]] 28 are used to form a linked list 32a that specifies the transmit sequence of the transmitted work queue entries; in the case of the last transmitted WQE entry (e.g., WQE5), the table manager 22 inserts the corresponding identifier ("4") representing the end of the linked list 32a. If in step 104 the table manager 22 determines there are prior stored entries 24 of transmitted WQEs, the table manager 22 updates the transmit sequence link field 28 of the prior end of the transmit sequence (e.g., entry "n") with the identifier of new subsequently transmitted work entry (e.g., "4" for WQE 5). The process repeats itself in step 108 for the next transmitted WQE. As illustrated in Figure 2, the linked list 32a specifies the transmit sequence of WQEs WQE1, WQE2, WQE3, WQE4, and WQE5, even though the respective entries 24 are not in contiguous memory locations.

Replace the paragraph starting at page 10, line 22, with the following replacement paragraph:

Figure 3B is a diagram illustrating generation of the second linked list 32b within the same table 20 configured for storing attributes of the transmitted WQEs. The second link field 30 is used to form a second [[link]] linked list 32b that specifies the acknowledgment sequence of transmit work queue entries. As illustrated in Figures 2 and 3B, the acknowledgment detector [[34]] 36 is configured for detecting the acknowledgements for the WQEs stored in the table 20. The acknowledgement detector, in response to detecting an acknowledgment for one of the stored [[were]] work queue entries in step 110, notifies the table manager 22 of the acknowledgement for the specified WQE. The table manager [[24]] 22 adds in step 112 the entry identifier of the WQE receiving the acknowledgement (e.g., "4" for WQE5). If in step 114 there are no prior acknowledgments, the table manager 22 repeats the sequence in step 118 for subsequent acknowledgments.

Replace the paragraph starting at page 10, line 32, with the following replacement paragraph:

However if prior acknowledgments have been received, the table manager 22 updates in step 116 the acknowledgment sequence link field 30 of the prior end of the acknowledge sequence (e.g., entry "n") with the identifier of work entry (e.g., "4" for WQE 5) having received the subsequent acknowledgment. Hence, the table manager 22 is able to generate the second linked list 32b, indicating the sequence of acknowledgments, illustrated in Figure 2 as the sequence WQE1, WQE2, WQE4, and WQE5. Hence, the table manager 22 can parse the second linked list 32b in step 120 and compare with the first linked list 32a to determine the transmitted work queue entries awaiting acknowledgment (e.g., WQE3).